

Communication difficulties with limited English proficiency patients: clinician perceptions of clinical risk and patterns of use of interpreters

Ben Gray, James Stanley, Maria Stubbe, Jo Hilder

Abstract

Aims To explore clinicians' perceptions of the communication difficulties experienced with Limited English Proficiency (LEP) patients and the clinical risks these difficulties pose in hospitals, as well as patterns of interpreter use among these clinicians.

Methods Senior health professionals in the two District Health Boards (DHBs) in the Wellington Area (about 900) of New Zealand were sent an electronic survey. Twenty clinicians were interviewed about their experience in 22 consultations with LEP patients, and an equal number with English proficient patients. Descriptive statistics were calculated, and 95% confidence intervals and formal statistical tests.

Results 141 responses were received to the survey. There was a high level of awareness of how to access interpreters (84%) and lesser awareness of DHB interpreter policy (65%). Most respondents felt that communication difficulties with LEP patients have a significant effect on care at least sometimes, but there is a wide variation in reported actual use of interpreters, with only 14% always using an interpreter. In the actual consultations studied, no professional interpreters were used despite clinician acknowledgement of increased clinical risk.

Conclusion Even when clinicians are aware of policy, of how to obtain interpreters, and of the increased clinical risk in the situation, this does not necessarily lead to high levels of interpreter use with LEP patients.

New Zealand (NZ) has an increasingly diverse population, and health services now deal with significant numbers of Limited English Proficiency (LEP) patients. The international literature shows that identifiable misunderstandings occur far more frequently in consultations with LEP patients¹, and that failure to use a professional interpreter leads to increased risk of adverse outcome.^{2,3}

Language barriers have been found to increase risks to patient safety^{4,5} and affect clinicians' ability to understand symptoms and treat disease.⁶ Despite these risks, interpreters are often not used for complex reasons that go beyond time constraints and lack of interpreter availability, with doctors often preferring to 'get by' without an interpreter even when interpreters are readily available.⁷ In many cases, family members are relied upon for interpreting.⁷⁻¹³

The small amount of NZ research in this field has shown that bilingual medical students are on occasion asked to interpret for patients in hospitals, sometimes resulting in unsafe practice,¹⁴ and that there are difficulties in communication with LEP patients for general practitioners in Auckland.^{10,15,16}

There is no evidence available on how frequently communication is a problem for LEP patients in NZ hospitals.

District Health Boards (DHBs) in areas with large immigrant populations now have policies that interpreters be used for LEP patients¹⁷⁻¹⁹. For example, Capital & Coast DHB's policy states that an interpreter is required when "health professionals assess that an interpreter is necessary to ensure safe and adequate assessment, planning, and intervention of care and treatment, e.g. to obtain informed consent", outlines the risks of using untrained interpreters, gives guidance on how to assess the need for an interpreter and how to use one, and states who should bear the cost.

Interpreting services are still not fully developed in NZ, and there is no NZ accreditation system for interpreters. Telephone interpreters are now readily available, since the establishment in 2003 of "Language Line" which provides affordable, accessible telephone interpreting services.

In most circumstances they are able to provide an interpreter at the time of the request in many languages, often utilising interpreters in Australia. However, uptake is only slowly increasing, and the service is only available from 9am to 6pm Monday to Friday and 9am to 2pm on Saturdays.

While the literature on use of interpreters in medical care has frequently explored patient and/or clinician satisfaction, effects on quality of care, and patterns of use, we have found none that specifically explores clinicians' perceptions of the increased clinical risk when interpreters are not used. The aim of this study is to explore clinicians' perceptions of the communication difficulties experienced with LEP patients and the clinical risks these difficulties pose in hospitals in the Wellington area. It also explores patterns of interpreter use among these clinicians.

Methods

The study was conducted in two phases, the first a survey of senior health professionals in the two District Health Boards in the Wellington Area, and the second a questionnaire targeted to a small number of clinicians as they actually encountered LEP patients. Approval to conduct this study was granted by the Central Regional Ethics Committee.

Phase 1—In Phase 1 of the study, an e-mail asking respondents to complete a survey online was sent to all clinicians who consulted independently in Wellington, Kenepuru and Hutt Hospitals—this included senior doctors, registrars, dentists, physiotherapists, occupational therapists, social workers and nurses in Capital & Coast District Health Board (CCDHB) and Hutt Valley District Health Board (HVDHB).

We excluded house surgeons and ward nurses but included district nurses and specialist nurses (diabetes, respiratory etc). In addition, paper copies of the survey were also distributed in the Emergency Department of Wellington Hospital, and the survey link may have been forwarded by some respondents to colleagues. In total the survey was distributed to around 900 health professionals.

A list of survey questions is provided in Appendix 1. In addition to demographic questions, the survey asked clinicians questions about:

- What languages they speak,
- How often they see LEP patients,
- How often they use interpreters (professional or otherwise) with LEP patients,
- Their awareness of DHB policy on interpreters and knowledge of how to access them, and
- Whether they felt that communication difficulties significantly affected their care of LEP patients.

Within the survey, an LEP patient was defined as “a person for whom English is not their first language AND whose level of English limits the extent of communication in the consultation. This group includes 1) Speakers with very little English, such that consultation is not possible without an interpreter OR 2) Speakers with some English but insufficient English to conduct a comprehensive consultation.”

Data were exported from the online survey to Microsoft Excel/Access software for data cleaning (e.g. removing duplicate responses) and further organisation (e.g. calculating number of languages spoken by each respondent.) Descriptive statistics were calculated using Microsoft Excel software; 95% confidence intervals and formal statistical tests were calculated using R (R 2.9.1, R Foundation, Austria).

Phase 2—Phase 2 of the study investigated the actual communication between a small number of LEP patients and clinicians in patient consultations, and an equal number of English proficient patient consultations. This phase was conducted predominantly in the Emergency Department (ED) of Wellington Hospital where there was clinician support for the research. Some interviews were also conducted at the ED Short Stay Unit, a medical ward where patients were transferred from ED, the Medical Assessment and Prioritisation Unit, the Outpatient Department, the Pacific Congestive Heart Failure Unit, and the Neonatal Unit.

When a patient presented who was registered as born outside NZ, a research nurse spoke with the clinician to determine if there had been any language difficulty. When language difficulty was identified, the nurse interviewed the clinician at a convenient time and noted their answers to a questionnaire (see Appendix 2). To provide a comparison group, the clinician was interviewed regarding consultation with the next English proficient patient after this LEP patient.

Questions covered whether this was a first consultation with the patient, the complexity of the consultation, any communication difficulties, whether there was extra clinical risk as a result of these, as well as the clinician’s assessment of the patient’s English-speaking ability and details of any interpreter usage. The research nurse also noted any additional comments that the clinician made about communication with LEP patients in general. The same list of questions was used for the LEP patients and the comparison group patients.

Data analysis—Descriptive statistics were mostly used to summarise clinicians’ responses. For categorical data regarding knowledge and use of interpreters, 95% confidence intervals are reported in the text. Ordinal data on frequency of interpreter use and frequency of communication problems were analysed using non-parametric tests, as noted in the results section – non-parametric equivalents of the t-test/ANOVA for comparing answers between groups (Wilcoxon Signed Ranks Test, Mann-Whitney test, Kruskal-Wallis test), and non-parametric versions of correlations (Spearman’s rank correlation coefficient) when asking whether scores on one ordinal variable were associated with higher scores on another ordinal variable. McNemar’s Chi-squared statistic was used to ask whether knowledge of DHB policy was independent of practical knowledge on how to access interpreters.

Results

Phase 1

A total of 141 responses were received, which was a 15.6% return rate. Not all survey responses contained answers to all questions.

Demographic characteristics—Most of the respondents (85%) were of European (64% NZ European) ethnicity (calculated using prioritised ethnicity²⁰), with the remainder split between Asian (5.7%), Māori (3.5%), Pacific (2.8%) and Other (2.1%). They were predominantly female (64%).

In terms of positions held, the largest group of respondents were Senior Medical Officers (38%), with significant numbers of registrars (24%) and nurses (21%). Senior House Officers made up 5% and Others (12%) included 6 occupational therapists, 5 social workers, 4 senior dentists, a hand therapist and a midwife. The

level of experience of the respondents ranged from 1 year to 42 years, with a median of 15.5 years.

Language background of respondents—Most respondents (72%) were monolingual English speakers, but more than a quarter (28%) were bi- or multilingual. NZ Europeans had a lower level of bi- or multi-linguality compared to other ethnicities, as shown in Table 1.

Table 1. Number of languages spoken by respondents, by ethnicity (Phase 1)

Prioritised ethnicity	Number of languages spoken		Percentage who speak more than 1 language
	1	2 or more	
NZ European	79	10	11.2%
European	16	16	50.0%
Māori	3	2	40.0%
Pacific	2	2	50.0%
Asian	2	6	75.0%
Other	0	3	100.0%
Total	102	39	27.7%

The most commonly spoken additional languages were European languages, as shown in Table 2.

Table 2. Languages spoken by respondents (Phase 1)

Languages spoken in addition to English	Number of respondents	% of total respondents
European languages	34	23.9%
Eastern Asia languages	9	6.3%
African languages	7	4.9%
Central Asian languages	4	2.8%
Pacific languages (including Māori)	4	2.8%
Middle Eastern languages	2	1.4%
NZ Sign Language	1	0.7%

Respondents' interaction with LEP patients and interpreters—About a third of respondents (32.17%) reported seeing no LEP patients on a regular basis, and almost another third saw one to two patients per week, as shown in Figure 1. About 35% saw three to seven LEP patients per week.

The survey asked two questions about interpreter use: “When you see a patient with Limited English Proficiency (LEP) do you use an interpreter?” and “Do you use a professional interpreter (paid by the DHB)?”, with responses on a five point scale ranging from ‘never’ to ‘always’. Results are shown in Table 3 (note that the column headings reflect the fact that only 3 of the 5 points on the scale were labelled in the questionnaire).

Figure 1. Number of Limited English Proficiency (LEP) patients seen per week

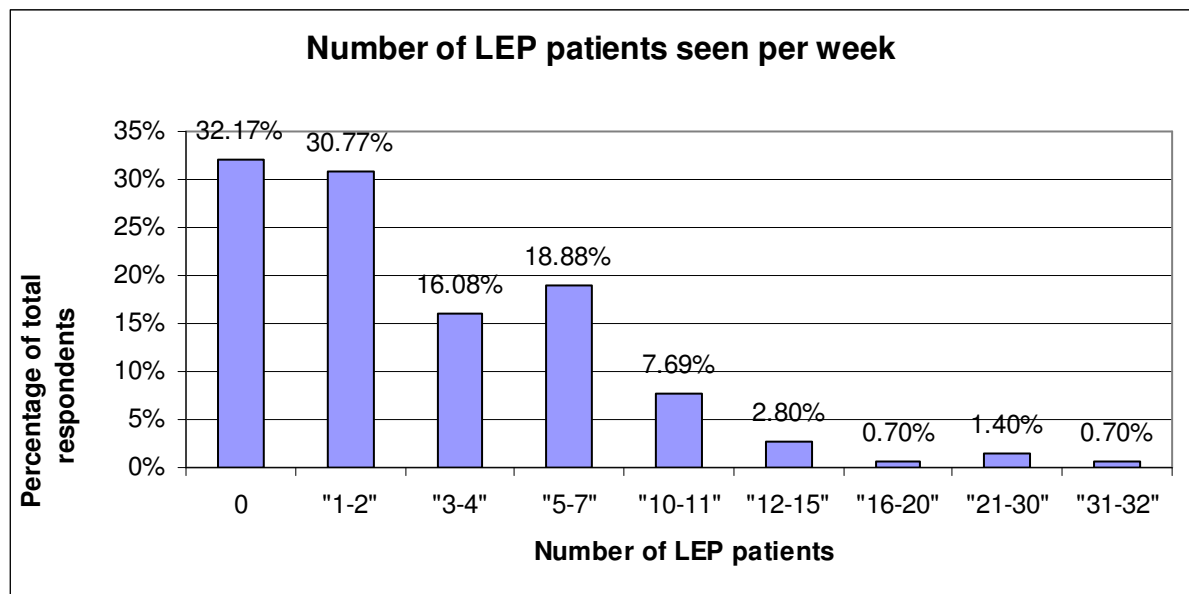


Table 3. Frequency of interpreter use (Phase 1)

Variables	Never		About half		Always	No response
Interpreter use	7 (5%)	29 (21%)	40 (29%)	41 (30%)	19 (14%)	7
Professional Interpreter use	17 (13%)	37 (27%)	34 (25%)	27 (20%)	20 (15%)	8

Although few respondents reported never using any form of interpreter, there is wide variation in the frequency of interpreter use among those who do. A slightly higher proportion reported never using *professional* interpreters with again a wide variation of frequency of use.

More respondents reported knowing how to access an interpreter if they needed one (84%; CI=77-89%) than reported awareness of their DHB's policy on interpreters (65%; CI=56-72%). Twenty-five percent lacked awareness of both the policy and of how to access professional interpreters (CI=18-33%), while 60% knew both the policy and how to access professional interpreters (CI=50-67%).

Answers to these two questions appeared to group together (85% of all respondents answered yes to both or no to both) and there was no tendency for respondents to either know the DHB policy but not how to access interpreters, or vice versa (McNemar Chi-squared=0.273, p=0.602).

Most respondents felt that communication difficulties with LEP patients have a significant effect on care at least some of the time, with 49% feeling that difficulties occurred more than half the time (see Table 4).

Table 4: Perceived frequency of significant effect of communication difficulties on care of LEP patients (Phase 1)

	Never		About half		Always	No response
Frequency (percentage)	4 (3%)	37 (27%)	28 (21%)	39 (29%)	27 (20%)	8

Correlations between variables—Table 5 shows the results of various statistical tests to explore the relationships between reported frequency of interpreter use and other variables.

Table 5. Statistical test results for relationships with frequency of interpreter use

Variable	Test result	
	Interpreters in general	Professional interpreters
Mono-lingual or multi-lingual	Mann-Whitney U=1688, p=0.310	Mann-Whitney U=1430.5, p=0.038 (new target alpha=0.025 for two comparisons)
Position held	Kruskal-Wallis Chi-squared statistic (3 d.f.)=1.89, p=0.595	Kruskal-Wallis Chi-squared statistic (3 d.f.)=0.64, p=0.888
Years of experience	Spearman's rho=0.217, p=0.011	Spearman's rho=0.217, p=0.034 (new target alpha=0.025)
Awareness of DHB policy	Mann-Whitney U=1794, p=0.161	Mann-Whitney U=1494, p=0.005
Knowledge of how to access professional interpreters	Mann-Whitney U= 916.5, p=0.044	Mann-Whitney U= 691.5, p<0.001
Number of LEP patients seen each week	Spearman's correlation -0.166, p=0.053	Spearman's correlation coefficient=-0.257, p=0.003

There were no significant differences in reported frequency of interpreter use in general according to whether respondents were mono-lingual or multi-lingual respondents, what position they held, or how aware of DHB policy they were, although professional interpreter use was higher among those with awareness of policy.

Years of experience was associated with more frequent interpreter use in general. There was weak evidence of an association with more frequent use of *professional* interpreters (although this relationship was not significant after adjusting for multiple tests).

Knowledge of how to access professional interpreters was associated with more frequent use of both interpreters in general and professional interpreters.

Respondents who see more LEP patients per week (considered as an ordinal variable) tend to use interpreters less frequently as a proportion of all LEP patients. This relationship was strongest for professional interpreters. For interpreters in general, the findings were inconclusive (falling outside the required level when alpha was adjusted for multiple comparisons).

There was weak evidence that multi-lingual respondents used professional interpreters *less* frequently than mono-lingual respondents but this result was not significant after adjusting for multiple comparisons.

Table 6 shows Mann-Whitney results that indicate that there were no differences in clinicians' perceptions of communication difficulties with LEP patients relating to awareness of DHB policy or how to access professional interpreters.

Table 6. Statistical test results for relationships with perception of communication difficulties with LEP patients

Variable	Test result
Awareness of DHB policy	Mann-Whitney U=2039, p=0.818
Knowledge of how to access professional interpreters	Mann-Whitney U= 1055, p=0.248

Phase 2

Questionnaires were administered to 20 clinicians (6 doctors, 13 registered nurses and one radiographer) regarding 22 LEP consultations (13 in ED) and 21 English proficient consultations. In two cases, the same patient was seen by two clinicians and data was gathered on each consultation separately.

Most of the LEP patients (87%) spoke very little or only intermediate English, as judged by the clinicians (Table 7).

Table 7. Clinician perception of English-speaking ability of LEP patients seen in Phase 2

English-speaking ability	Number of LEP patients
Native English speaker or equivalent	0 (0%)
Fluent (fluent English speaker with some limitations)	3 (13%)
Intermediate (some English but insufficient to conduct a comprehensive consultation)	7 (32%)
Very little (so little that a basic consultation is not possible without an interpreter)	12 (55%)

Differences between the LEP consultations and the control group that might affect the quality of the communication were tested. The complexity of the consultation was rated higher for the LEP patients than for the controls (Related-Samples Wilcoxon Signed Ranks Test=0.38), although whether clinician perception was skewed by the confounding communication difficulties, or whether LEP patients may present with more complex issues (possibly due to a reluctance to face the communication difficulties for less complex issues) is not able to be determined.

The perceived communication difficulties in the LEP consultations were judged to increase clinical risk, as shown in Table 8.

Table 8. Clinician perception of clinical risk in LEP consultations in Phase 2

Was there extra clinical risk as a result of the communication difficulties?				
Type of risk	Uncertainty as to whether medical terms were understood	Uncertainty that treatment regime was understood	Uncertainty that informed consent was adequately obtained	Part of the history was avoided due to communication difficulty
Median	3	3	3	1
1 st Quartile	2	1	1	1
3 rd Quartile	4.75	4	5	4

Degree of risk: 1=minimal; 3=moderate; 5=considerable.

Interpreter use—An interpreter was used in 17 of the 21 LEP consultations, none of whom were professional interpreters. No telephone interpreters were used, although in one consultation an attempt was made to obtain one. Family members were used in 11 consultations, a nurse was used in four consultations, and other ad hoc interpreters (social worker or member of a refugee group) were used in two consultations.

The communication difficulties that clinicians experienced were mostly problems with patients' responses (no response, yes/no responses only, or variable responses), apparent lack of comprehension by the patient (including difficulty with following instructions) and clinician difficulty in understanding the patient. In three consultations, the patient's condition (dementia or Parkinson's) also contributed to communication difficulties.

Discussion

This study shows that hospital clinicians do perceive there to be clinical risk associated with the communication difficulties that they face with LEP patients, but despite this, rarely use trained interpreters. There is a clear mismatch between actual practice and the relatively high levels of awareness of policy, methods of accessing interpreters and the significance of communication difficulties for quality of care. Although 20% of respondents in Phase 1 felt that communication difficulties with LEP patients significantly affect their care, and 84% claim to know how to access professional interpreters, only 14% report always using an interpreter.

In the study of actual practice (Phase 2), most of the 22 consultations with LEP patients used an interpreter but none used trained interpreters, and in only one case was an attempt made to engage one, again despite the clinicians' acknowledgement of extra clinical risk in most cases.

The finding that family members were the most commonly used form of interpreter accords with the literature. One consultation was (in the clinician's view) successfully interpreted by a family member such that there was minimal clinical risk, which suggests that there are situations where such interpreters may be appropriate, but in most other consultations, the clinicians perceived risk in this practice.

These results contrast with the relatively higher use of professional interpreters found in a general practice in Newtown, Wellington, but where family members were also commonly used, often satisfactorily.²¹ The very different contexts probably account for these differences.

In the Phase 1 survey, no significant differences in the frequency of use of trained interpreters were found between clinicians of different demographics (e.g. more experience, being multilingual themselves etc). A higher level of bi- or multi-linguality was found in the surveyed population than in the general population (17.5%²²), although less than in a study of doctors in Auckland in which more than half spoke more than one language¹⁵.

The relatively high level of bi- or multi-linguality may reflect the foreign-born status of many doctors and/or be a selection effect in that speakers of more than one language are more interested in or aware of language issues and thus more likely to respond to the survey. However, the hypothesis that such clinicians would be more sensitive to the issues and more likely to use interpreters was not borne out.

Awareness of DHB policy did seem to be associated with greater use of trained interpreters, and more experienced clinicians did report higher interpreter use in general, including untrained interpreters. These two points indicate that training to make clinicians more aware of policy and to share the knowledge and awareness that their more experienced colleagues attain over time would increase the frequency of use of interpreters.

This study has limitations in that only clinician perspectives were examined, and the response rate to the Phase 1 survey was low. It is possible that the opinions of those people who responded to the survey are different from the opinions of non-responders, leading to potential bias in the results. Given that further information was not available on the non-responders, it is not possible to speculate on the potential direction of this bias.

It is not clear whether all respondents interpreted the question asking them how often they used interpreters (as opposed to “professional interpreters”) in the same way, as some may not have counted use of family members in this role when answering this question. The number of actual consultations studied in Phase 2 was also small and mostly limited to those in ED due to logistical difficulties. Patient perspectives and actual clinical outcomes would be useful measures to study in future research.

Trained interpreters were found to be seldom used in hospitals. The question remains as to why this is the case. It is clearly not because clinicians feel that current practice is satisfactory. Future research will be needed to explore the possible explanations for this, which might include a problem with current policy (which may be too prescriptive or not realistic); lack of clinician training in the risks involved, what their alternatives are and the complexity of the judgement required in deciding on the appropriate strategy; budget constraints; availability of interpreters (e.g. the 9 to 5 nature of ‘Language Line’ is of limited use in ED); or underlying (unacknowledged) attitudes of clinicians toward LEP patients.

Other research has found that improving systems, monitoring interpreter use²³ and training in interpreter use⁶ increase the rates of usage of interpreters. Such measures, especially the training of clinicians in the complexity of the issues surrounding communication with LEP patients, would be useful since this study suggests that awareness of policy and of how to obtain interpreters, and even of the increased clinical risk in the situation, is not sufficient to change clinician behaviour.

Competing interests: None.

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Appendix 1. Survey used in Phase 1

Research Survey on LEP

1.

1. Which DHB are you working in?

☐ Capital & Coast DHB

☐ Hutt Valley DHB

2. Name (First name then Last name)

3. Position

☐ Nurse

☐ Physiotherapist

☐ Registrar

☐ Senior Medical officer

☐ Other (please specify)

4. Gender

☐ Male

☐ Female

5. How Many Years Since Qualification (enter as a number please e.g. 3)

6. Which Ethnic Group do you belong to?(tick as many boxes as apply)

<input type="checkbox"/> Chinese	<input type="checkbox"/> New Zealand European
<input type="checkbox"/> Cook Island Maori	<input type="checkbox"/> Niuean
<input type="checkbox"/> Indian	<input type="checkbox"/> Samoan
<input type="checkbox"/> Maori	<input type="checkbox"/> Tongan

Others (please specify)

2.

Research Survey on LEP

7. What Language(s) did you grow up with?

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Cantonese | <input type="checkbox"/> Mandarin |
| <input type="checkbox"/> Cook Island Maori | <input type="checkbox"/> Maori |
| <input type="checkbox"/> English | <input type="checkbox"/> Niuean |
| <input type="checkbox"/> Gujarati | <input type="checkbox"/> Samoan |
| <input type="checkbox"/> Hindi | <input type="checkbox"/> Tongan |

Others (please specify)

8. What other language(s) do you speak fluently?

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Cantonese | <input type="checkbox"/> Mandarin |
| <input type="checkbox"/> Cook Island Maori | <input type="checkbox"/> Maori |
| <input type="checkbox"/> English | <input type="checkbox"/> Niuean |
| <input type="checkbox"/> Gujarati | <input type="checkbox"/> Samoan |
| <input type="checkbox"/> Hindi | <input type="checkbox"/> Tongan |

Others (please specify)

9. What Languages do you use during consultations?

- | | |
|--|-----------------------------------|
| <input type="checkbox"/> Cantonese | <input type="checkbox"/> Mandarin |
| <input type="checkbox"/> Cook Island Maori | <input type="checkbox"/> Maori |
| <input type="checkbox"/> English | <input type="checkbox"/> Niuean |
| <input type="checkbox"/> Gujarati | <input type="checkbox"/> Samoan |
| <input type="checkbox"/> Hindi | <input type="checkbox"/> Tongan |

Others (please specify)

10. How often do you see patients with Limited English Proficiency (LEP)? Please answer either daily, weekly or monthly.

For the purpose of this survey, a patient with limited English Proficiency is defined as a person for whom English is not their first language AND whose level of English limits the extent of communication in the consultation. This group includes 1) Speakers with very little English, such that consultation is not possible without an interpreter OR 2) Speakers with some English but insufficient English to conduct a comprehensive consultation.

	number
Daily	<input type="text"/>
Weekly	<input type="text"/>
Monthly	<input type="text"/>

Research Survey on LEP

11. When you see a patient with Limited English Proficiency (LEP) do you use an interpreter?

Never about half Always

Frequency ☐ ☐ ☐ ☐ ☐

3.

12. Do you use a professional interpreter (paid by the DHB)?

Never about half Always

Frequency ☐ ☐ ☐ ☐ ☐

13. Are you aware of the DHB Policy on Interpreters

- ☐ No
- ☐ Yes

14. Do you know how to access a professional interpreter if you need one?

- ☐ No
- ☐ Yes

15. Communication difficulties are common when consulting with Limited English Proficiency(LEP) patients.

Do you think these difficulties significantly affect your care of LEP patients?

Never about half Always

Frequency ☐ ☐ ☐ ☐ ☐

Appendix 2. Questionnaire used in Phase 2

Does communication difficulty with Limited English Patients increase physician assessed likelihood of adverse outcome?

1. Was this the first time you had seen this patient? (1) yes (2) no

2. What was the complexity of the consultation?

1. Simple	2.	3. Moderate	4.	5. Complex
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3. Were there communication difficulties? (a) Yes (b) No

4. If yes what were the nature of these difficulties?

5. If communication difficulties were present how did you identify this?

6. Was there extra clinical risk as a result of the communication difficulties?

a) Uncertainty as to whether medical terms were understood..

1. Minimal	2.	3. Moderate	4.	5. Considerable
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b) Uncertainty that treatment regime was understood.

1. Minimal	2.	3. Moderate	4.	5. Considerable
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c) Uncertainty that informed consent was adequately obtained.

1. Minimal	2.	3. Moderate	4.	5. Considerable
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d) Part of the history was avoided due to communication difficulty (e.g. sexual history)

1. Minimal	2.	3. Moderate	4.	5. Considerable
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e) Other

7. How would you describe this patient's English-speaking Ability?

- a) Native English Speaker or equivalent
- b) Fluent English Speaker (fluent) with some limitations
- c) Speaker with some English but insufficient to conduct comprehensive consultation (intermediate)
- d) Speaker with so little English that a basic consultation is not possible without interpreter (very little)

8. Did you use an Interpreter? (a) Yes (b) No

9. If "Yes", was this Interpreter

- a) Professional Accredited (e.g Language Line, Wellington Community Interpreters)
- b) Paid not accredited (Some Hospital employed interpreters are not accredited)
- c) Ad Hoc: family member, friend not paid.

10. Was the Interpreter present: (a) in the room or (b) via telephone?

11. If an interpreter was used how was this achieved?:

- a) Arranged ahead of the appointment
- b) Brought by the patient
- c) Telephone interpreter engaged at the time.

Thank you for your participation